

# **McAlpine Lock Closure August 2004**

## **Event Study and Survey Results**

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*[www.corpsnets.us](http://www.corpsnets.us)*



# McAlpine Lock Closure August 2004

## Problem Discovered - Public Notified

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- Dive Inspections revealed extensive gate cracking, April-May 2004
- Severe disruption expected
- Meeting with Shippers, Carriers, USCG, and Corps May 27, 2004
- Shippers made case for additional time to prepare
- Closure schedule slipped 6 days
- Closure scheduled for August 9-22, 2004



# McAlpine Lock Closure August 2004

## All Parties Prepare for Closure

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- Shippers and carriers accelerate shipments as much as possible
- US Coast Guard prepares to declare McAlpine and Cannelton pools Regulated Navigation Areas
- Corps conducts dive inspections every two weeks, fabricates reinforcing plates, organizes additional experienced repair crew, creates web site, plans work activities, reschedules closures at Markland and Meldahl
- Corps, USCG and carriers organize Command Center which will direct traffic during and after closure
- Carriers prepare guidelines for prioritizing loads after lock reopens



# McAlpine Lock Closure August 2004

## Fleet Prepares for Dewatering

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# McAlpine Lock Closure August 2004

## August 9 – Bulkheads and Pumps Set

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# McAlpine Lock Closure August 2004

## August 10 - Dewatering Begins

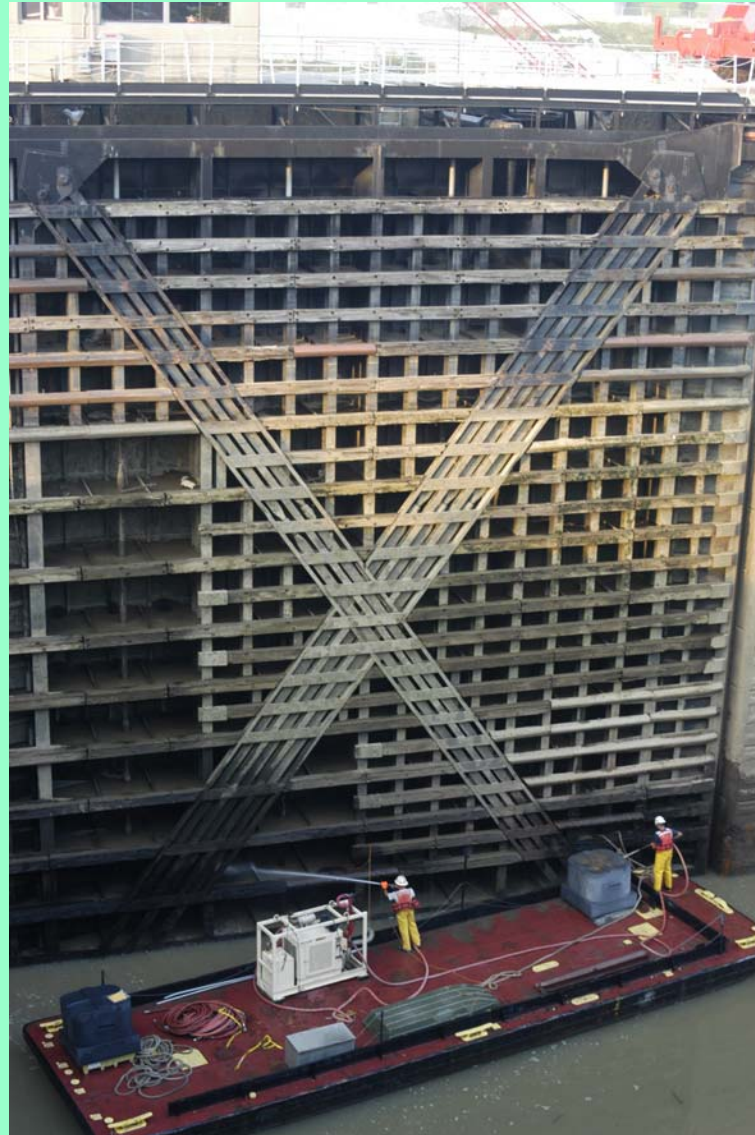
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# McAlpine Lock Closure August 2004

## August 10 - Gates Cleaned as Dewatering Proceeds

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# McAlpine Lock Closure August 2004

## August 12 – Inspection Complete, Welding Begins

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## Welding Order Pre-marked on Each Plate

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## August 15 – All Plates Welded in Place

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## Additional Work While Plates Installed

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# McAlpine Lock Closure August 2004

## Dredging During Closure

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# McAlpine Lock Closure August 2004

## US Coast Guard Patrolled Queued Vessels

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## Command Center Staffed 24/7





# McAlpine Lock Closure August 2004

## At Closure's End

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- Closure ended 3 days early
- Only 16 tows in queue at end of closure
- Only one high priority tow was assembled and served at end of closure

# **McAlpine Lock Closure August 2004**

## **Federal – Non Federal Direct Closure Costs**

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### **Federal Non-Federal Costs**

	Cost	
Corps of Engineers	\$	1,869,000
US Coast Guard	\$	135,000
Non-Federal	\$	94,500
Total	\$	2,098,500



# McAlpine Lock Closure August 2004

## Industry Surveys – Waterways Council

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- Waterways Council conducted pre-closure survey
  - 101 companies contacted
  - 72 responded
  - 54 indicated negative impact
  - 24 severely impacted
    - Primarily chemical and metal manufacturers
  - Coping Strategies
    - Shift Supplier
    - Pre-ship to build inventory
    - Mode shift
    - Unload – truck around lock – reload
  - Impact would be much more severe without advance notice
  - Impact would be much more severe if closure duration exceeds 2 weeks

## McAlpine Lock Closure August 2004

### Industry Surveys – Waterways Council

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- Waterways Council also conducted post-closure survey
- Companies were less willing to respond
- Coping strategies included
  - Pre-shipping with attendant increased inventory and production costs
  - Shipping via alternate mode at increased cost
- Only 27 responded with cost information



## McAlpine Lock Closure August 2004

### Post Closure Surveys – Corps of Engineers

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- 60 shippers selected
  - 81% of traffic
- 20 responded
  - 42% of traffic
- Coping Strategies
  - Pre-ship to build stockpile, then wait
  - Several will maintain larger stockpile and/or switch to all-land mode

## McAlpine Lock Closure August 2004

### Post Closure Surveys – Corps of Engineers

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- 19 carriers selected
  - 96% of traffic
- 10 responded
  - 73% of traffic



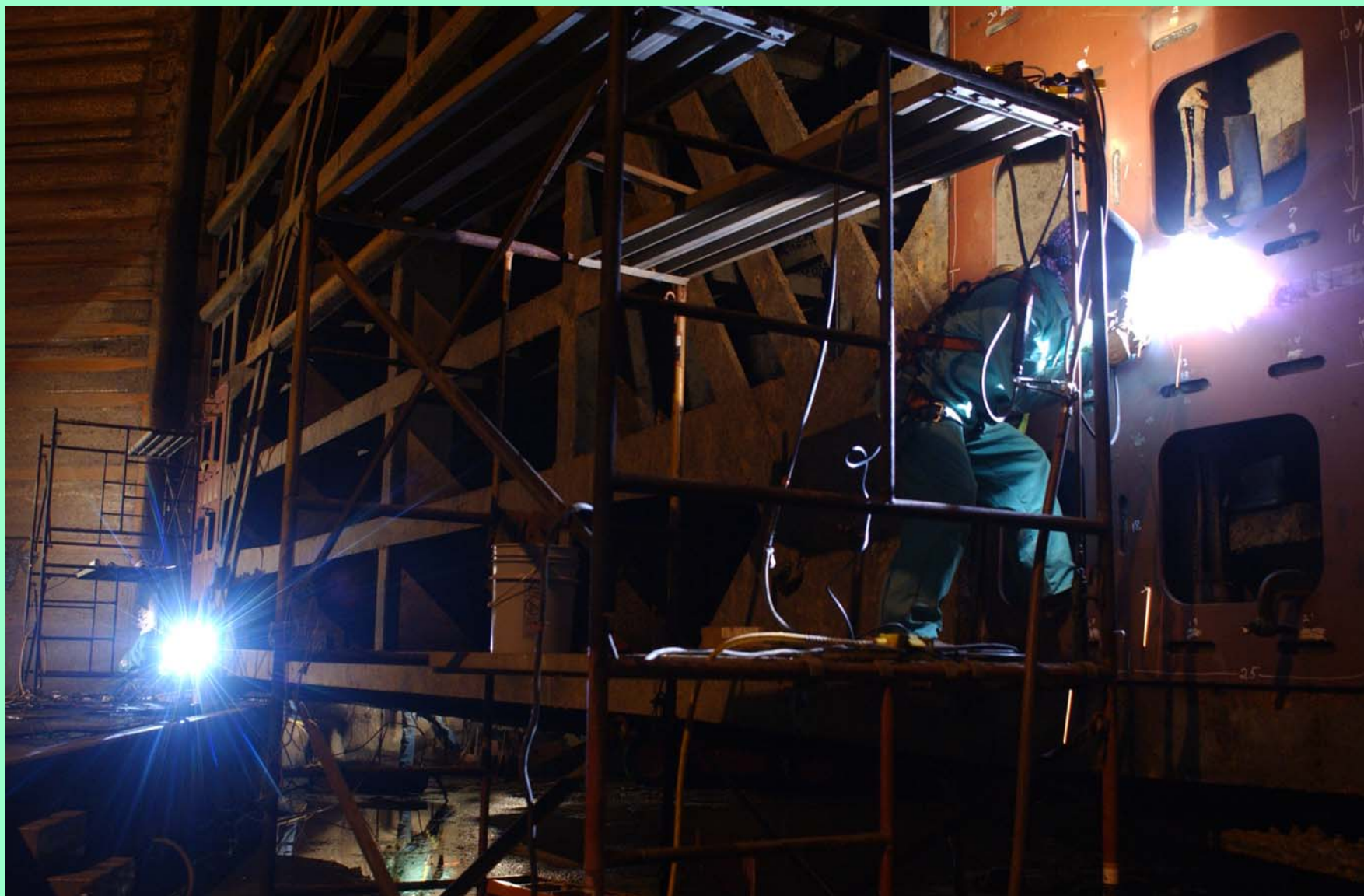
# McAlpine Lock Closure August 2004

## Survey Results

	Corps Survey		WCI Canvas		Total
	Responses	Added Cost	Responses	Added Cost	
No/Little Effect	6	\$ -	8	\$ -	\$ -
Stockpiling	6	\$ -	4	\$ 179,750	\$ 179,750
Mode Shift	6	\$ 2,311,871	8	\$ 350,881	\$ 2,662,752
Waterway Route Shift	2	\$ -	0	\$ -	\$ -
Altered Schedules	3	\$ 10,000	12	\$ 525,000	\$ 535,000
Demurrage	1	\$ 220,000	2	\$ 10,000	\$ 230,000
Other Costs	1	\$ 35,000	0	\$ 35,000	\$ 70,000
Lost Sales	1	\$ 40,800	9	\$ 665,000	\$ 705,800
Vessel Delays	2	\$ 1,961,896	0	\$ -	\$ 1,961,896
Total		\$ 4,579,567		\$ 1,765,631	\$ 6,345,198

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Questions?





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